**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Problem-solving Methodology: 4 Stages**

**Analyse**

**Design**

**Development**

**Evaluate**

**Case Study:**

**Indigenous Language Trust, (ILT)**

Using the case study, ILT complete the following:

**Analysis of the problem**

This stage involves the following three steps:

1. **Determining the solution requirements**
2. What needs to be established?  
   A website that would allow the different offices to exchange information.
3. How is the problem best defined?  
   The ILT has been operating for years by manually exchanging data between offices, this can affect the quality of the data.
4. The aim of problem analysis is to ensure that the problem is clear enough to effectively analyse it and efficiently solve it. Define these two terms, efficiency and effectiveness.  
   Efficiency is to do with time, cost and effort and effectiveness is how well a solution works.
5. What type of organisation is the ILT?  
   A non-profit community group.
6. In your own words, define the problem for ILT.  
   They are not able to exchange information easily between offices.
7. Identifying data and information needed for the solution, p 62;
   1. Need to identify where data is coming from for online community – inside or outside  
      The information is gathered from outside the organisation.
   2. In the ILT case study what is the information needed for the solution?  
      Contacts, policy documents, documentation regarding local Indigenous history, information regarding national cultural heritage.
8. Identifying the functions needed for the online community solution, p 63
   1. The functions needed for online communities can be separated into 2 distinct categories,
      * how the solution functions and   
        The function of the website is determined by its ability to broadcast information, exchange information and store knowledge.
      * attributes of the solution. List the characteristics of each of these.  
        The attributes of the website involve, ease of use, user friendliness, reliability, portability, robustness and the ability to be maintained.
9. What are the functions of the ILT website solution?  
   The website needs to allow the ILT offices to exchange information between each other.
10. **Identify the constraints on the solution, p 64**
    1. List the technical and non-technical constraints.  
       Non-Technical – Privacy, copyright, cultural constraints  
       Technical - Cost of the solution, time taken to access or exchange information, how secure the solution should be and the number of people accessing the online community at the same time.
    2. What are the constraints on the ILT solution?  
       They are a non-profit organisation, so they wouldn’t be able to spend much money on the solution unless they received donations or grants.
11. **Determine the scope of the solution, p 66**
    1. What needs to be considered in the scope of the solution?  
       Consider benefits of the solution on efficiency and effectiveness
    2. In the ILT case study list the benefits or the scope of the solution in terms of
       1. Efficiency and  
          It will greatly reduce the time and effort required to transfer data between offices.
       2. Effectiveness  
          The data could easily be presented in an easy to read way.